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October 14, 2008

Mr. Shane Pavitt
Mrs. Suzanne Pavitt
4660 Silverado Trail
Calistoga, CA 94515

Cc: Mr. Jon Webb
Albion Surveys, Inc.
1113 Hunt Avenue
Saint Helena, CA 94574

VIA E-Mail: suzpavitt@aol.com
jwebb@albionsurveys.com

**SUBJECT: Pavitt Family Vineyards Winery, Napa County, California --
Environmental Noise Assessment**

Dear Mr. and Mrs. Pavitt:

This letter presents the results of the environmental noise assessment conducted for the Pavitt Family Vineyards Winery project proposed at 4660 Silverado Trail in unincorporated Napa County. The noise assessment was requested by the County to address potential noise related effects that could result with the operation of the project. Based on our analysis of the noise environment in the vicinity of the project site, the anticipated activity schedule, and noise levels generated by activities associated with the winery's operation, we conclude that noise from the proposed winery would not have an adverse effect on nearby residential land uses.

Regulatory Criteria

2008 Napa County General Plan

The Community Character Element of the 2008 Napa County General Plan sets forth goals and policies to protect people from exposure to excessive noise. Goals and policies contained in this document that are relevant to the analysis are as follows:

NOISE GOALS

Goal CC-7: Accept those sounds which are part of the County's agricultural character while protecting the people of Napa County from exposure to excessive noise.

Goal CC-8: Place compatible land uses where high noise levels already exist and minimize noise impacts by placing new noise-generating uses in appropriate areas.

NOISE POLICIES

Policy CC-35: The noises associated with agriculture, including agricultural processing, are considered an acceptable and necessary part of the community character of Napa County, and are not considered to be undesirable provided that normal and reasonable measures are taken to avoid significantly impacting adjacent uses.

Policy CC-38: The following are the County's standards for maximum exterior noise levels for various types of land uses established in the County's Noise Ordinance. Additional standards are provided in the Noise Ordinance for construction activities (i.e., intermittent or temporary noise).

Land Use Type	Time Period	Noise Level (dBA) by Noise Zone Classification		
		Rural	Suburban	Urban
Single-Family Homes and Duplexes	10 p.m. -- 7 a.m.	45	45	50
	7 a.m. -- 10 p.m.	50	55	60
Multiple Residential 3 or More Units Per Building (Triplex+)	10 p.m. -- 7 a.m.	45	50	55
	7 a.m. -- 10 p.m.	50	55	60
Office and Retail	10 p.m. -- 7 a.m.	60		
	7 a.m. -- 10 p.m.	65		
Industrial and Wineries	Anytime	75		

Policy CC-48: Where proposed commercial or industrial land uses are likely to produce noise levels exceeding the standards contained in this Element at existing or planned noise-sensitive uses, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

Napa County Noise Ordinance

The Napa County Noise Ordinance Section 8.16.070, Exterior Noise Limits, requires that no person shall operate or cause to be operated any source of sound at any location within the unincorporated area of Napa County, or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person which causes a noise level when measured on any other property, either incorporated or unincorporated, to exceed the following limits for rural residential properties during the hours of 7:00 AM to 10:00 PM:

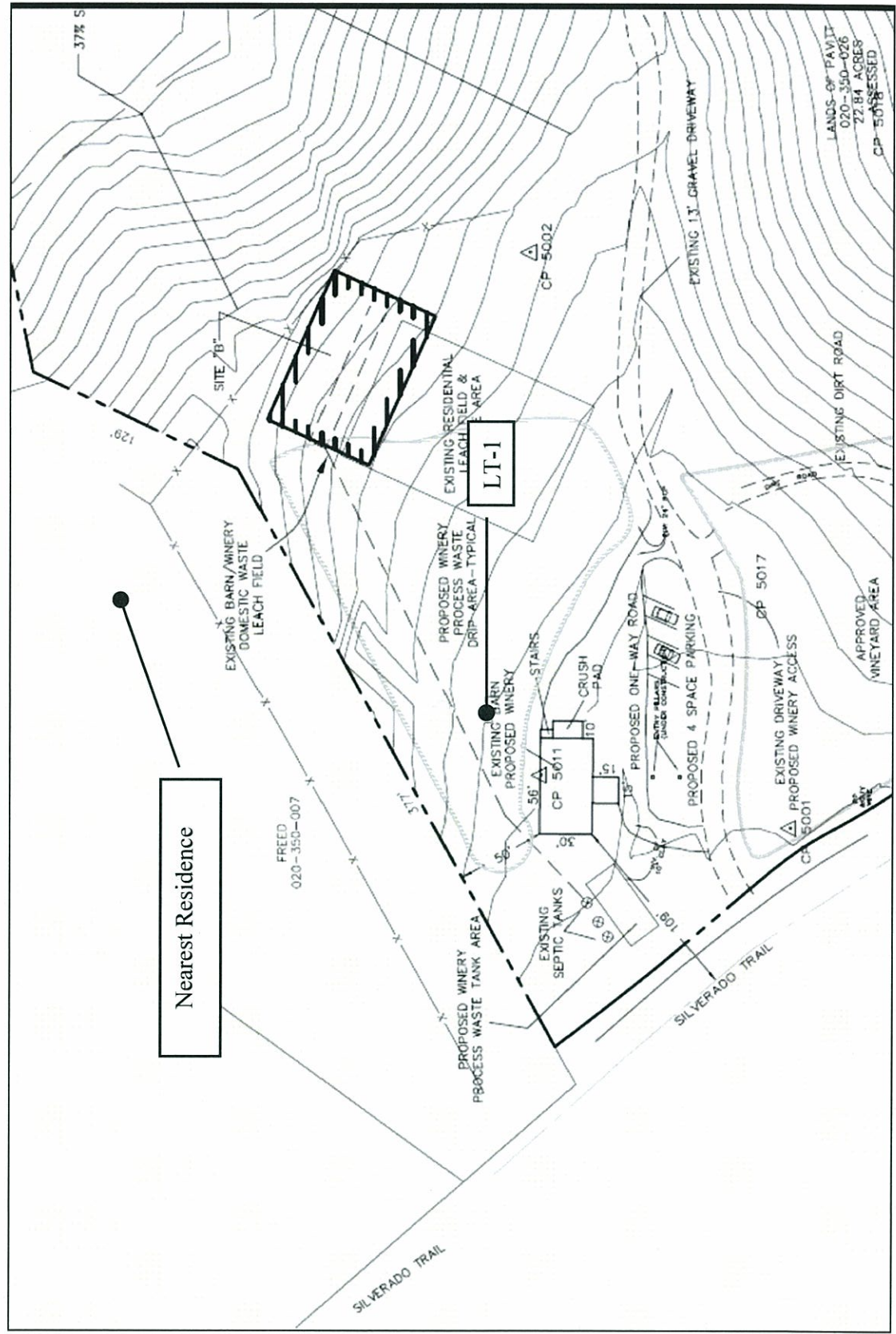
- a. 50 dBA for more than 30 minutes out of an hour;
- b. 55 dBA for more than 15 minutes out of an hour;
- c. 60 dBA for a period of more than 5 minutes out of the hour;
- d. 65 dBA for a period of more than 1 minute out of an hour; or
- e. 70 dBA for any period of time.

Nighttime noise level limits are 5 dBA more restrictive. The ordinance requires that noise levels be measured with a calibrated sound level meter using the A-weighting scale and the slow meter response. Measurements are to be conducted at any point on the complainant's property. Noise standards are higher for suburban or urban residential developments but it appears that the rural residential standard would be appropriate for the property north of the winery. The ordinance requires that adjustments be made to the standard if the Noise Control Officer judges the noise to contain a steady audible tone such as a whine, screech or hum, or is a repetitive noise such as hammering or riveting, or contains music or speech.

Existing Noise Environment

The noise environment in the project vicinity is predominantly the result of traffic along Silverado Trail. A long-term noise measurement was made at a distance of 260 feet from the center of Silverado Trail beginning at 11:00 a.m. September 29, 2008. The noise measurements continued over a 48-hour period and ended October 1, 2008. The noise measurement location is shown on Figure 1. The reference data is summarized on Figures 2 and 3.

The purpose of the long-term noise measurement was to document existing noise conditions at a representative location in the vicinity of the residence immediately north of the winery. Noise measurement LT-1 served as a reference point to estimate ambient noise levels at the nearest receiver. Ambient traffic noise levels are calculated to be about 3 dBA lower than those measured at the reference site given this receiver's additional distance from Silverado Trail. Based on the measured data, day-night average noise levels at the nearest residential receiver are estimated to be about 52 to 53 dBA L_{dn} . Daytime hourly average noise levels at the nearest receiver are approximately 44 to 50 dBA L_{eq} .



**Noise Levels at LT-1
~ 260 feet from the Centerline of Silverado Trail
September 29, 2008 to September 30, 2008**

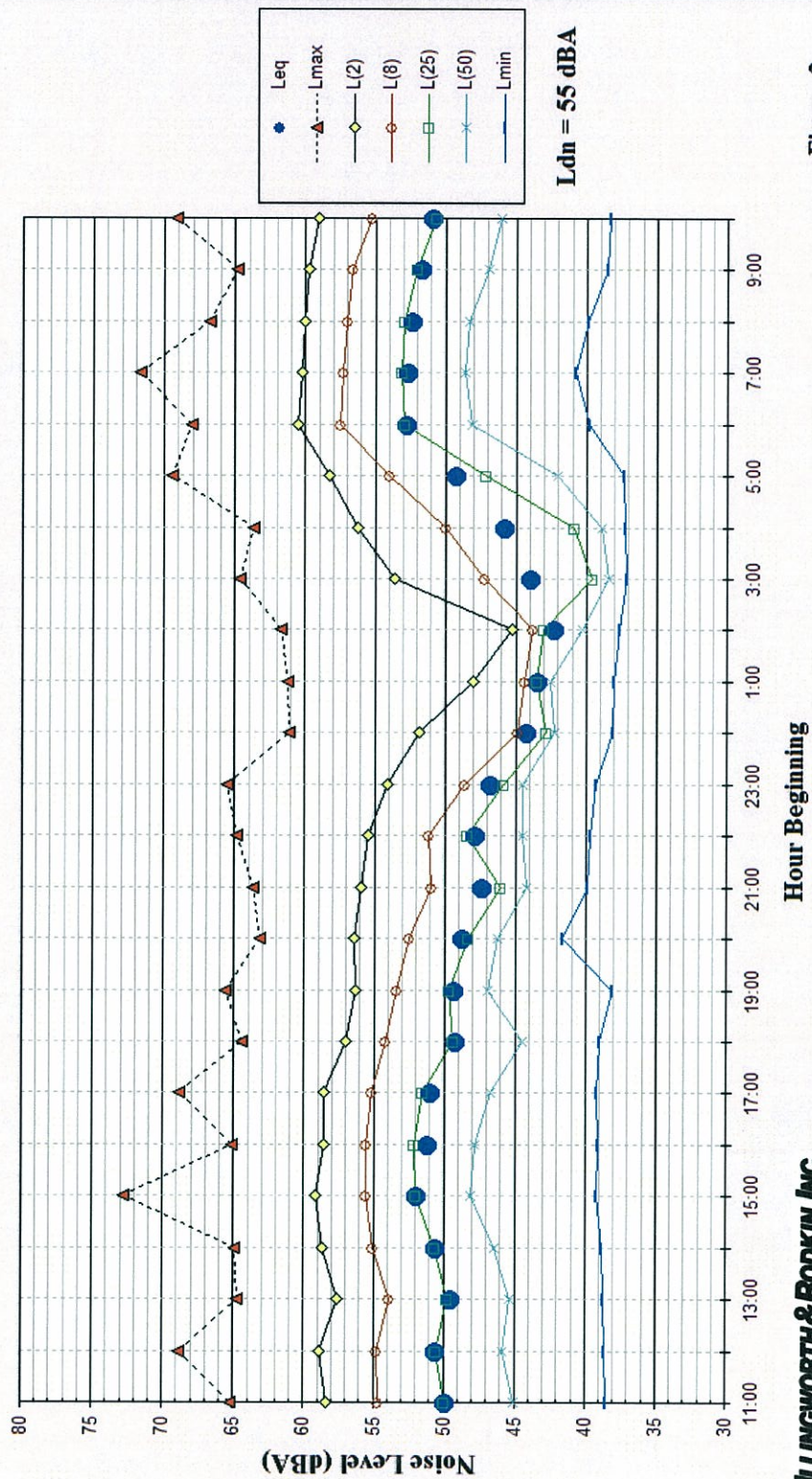


Figure 2

**Noise Levels at LT-1
 ~ 260 feet from the Centerline of Silverado Trail
 September 30, 2008 to October 1, 2008**

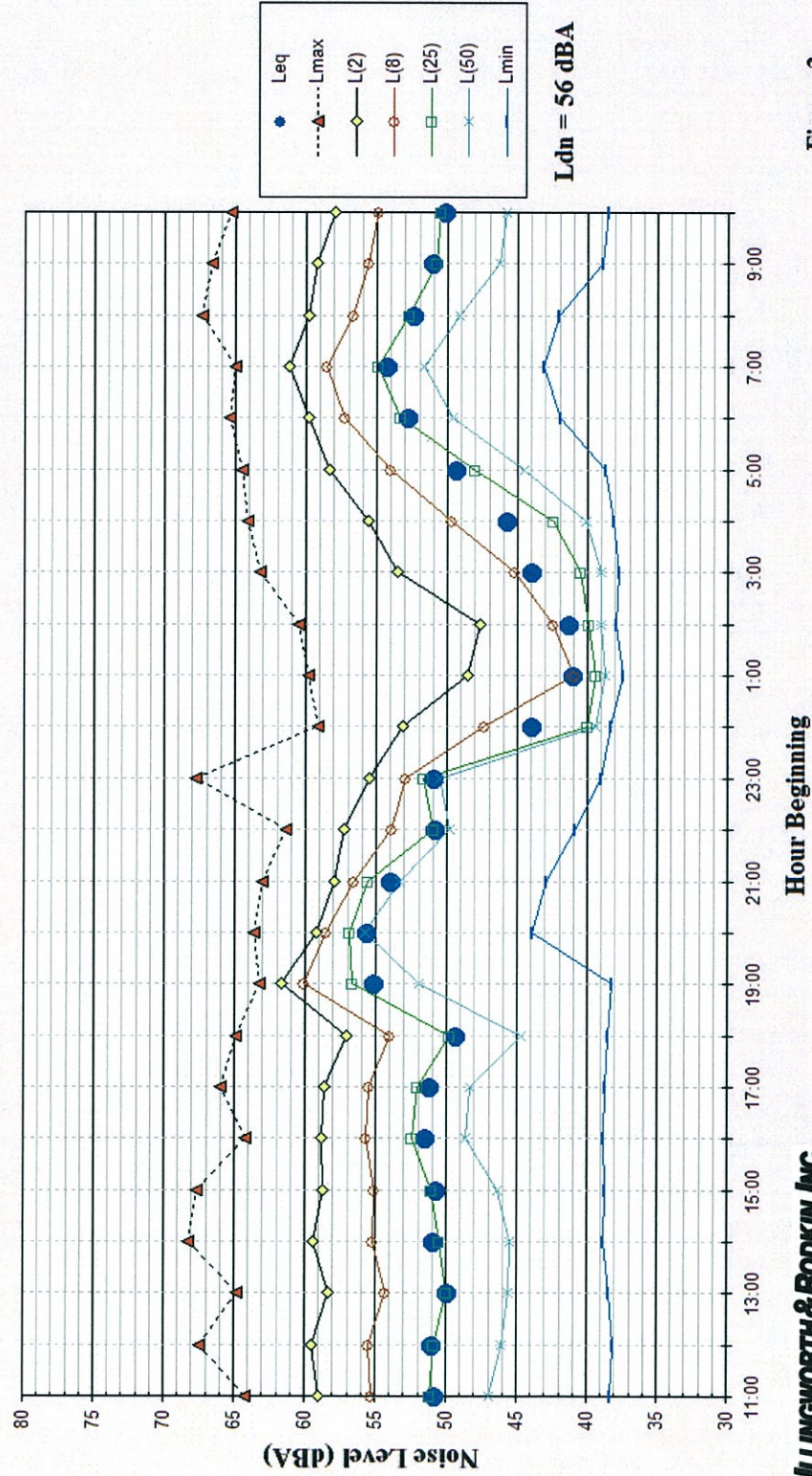


Figure 3

Future Operations at the Winery

The Pavitt Family Vineyard Winery would produce up to 10,000 gallons of wine per year. Tasting would be limited to a maximum of four persons per day on an appointment only basis. The winery would host private wine and food tastings for up to 10 people on four occasions per year, private wine and food events for up to 10 people on four occasions per year, and one private harvest event with a maximum of 30 people in attendance.

The nearest residence is located approximately 250 feet from the winery building and has direct line of sight to activities that would occur north or east of the winery. This residence would not have line of sight to activities occurring on the south or west sides of the winery. The building itself would provide a minimum of 10 dBA of noise reduction for activities occurring on the south and west sides of the winery.

Noise generated by the project would include sources such as increased vehicle traffic, driveway and parking lot noise, the operation of mechanical equipment, seasonal production related noise, and special events. A discussion of each of these project related noise sources is provided below.

Project Generated Traffic Noise Level Increase

The operation of the project would generate approximately 40 daily trips to the site along Silverado Trail. Up to five trips would occur during the peak traffic hour. The additional trips resulting from the project would not measurably increase traffic noise levels (less than 1 dBA L_{dn}) along Silverado Trail.

Driveway and Parking Lot Noise

Noise sources associated with the driveway and parking lot would include the sounds of vehicles accessing the parking area, engine starts, door slams, and voices. Typically, the sound of a passing car at 15 mph, engine starts, and door slams range from 50 dBA to 60 dBA at 50 feet. Noise data contained in Illingworth & Rodkin, Inc.'s files indicates that maximum noise levels from sources such as door slams, engine starts, idling of diesel powered vehicles, motorcycles, shouting, radios, etc. could occasionally generate noise levels in excess of 65 dBA L_{max} at 50 feet. The parking area and driveway are located approximately 300 feet from the nearest residence and maximum instantaneous noise levels from these intermittent sources of noise would be expected to range from 35 to 50 dBA L_{max} . Noise generated by vehicles accessing the parking area would generally be lower than ambient maximum noise levels and would be well below the Napa County Noise Ordinance limits for maximum noise levels occurring during the day or night.

Project Mechanical Equipment

The project would include noise-generating mechanical equipment such as an air-cooled condensing unit (portable chiller), and less significant sources of noise, such as an air-conditioning system or exhaust fans. The condensing unit would provide cooling during the fermentation process and to the barrel storage area. This unit would maintain the desired temperature and could operate over extended periods of time during the day or night. Based on data contained in Illingworth & Rodkin, Inc. files, a 10-ton chiller would generate noise levels of about 39 dBA at the nearest residential land use when located as proposed at the southwest corner of the winery building. Noise levels generated by the project's proposed mechanical equipment would be less than 45 dBA and would meet the daytime and nighttime noise level limits assuming operation for more than 30 minutes in any hour.

Seasonal Production Related Noise

Production related noise would occur during the crush season (mid-September to the end of October) and during bottling season (end of March through early September). Crushing activities would occur for a period of about one week per year. Grapes would be harvested from the vineyard for processing at the winery building and trucks would deliver grapes harvested from off-site vineyards. Grape bins would be unloaded from each truck with a propane forklift. Grapes would be crushed on the south side of the winery building. Based on data gathered by Illingworth & Rodkin, Inc., noise levels generated during grape crushing activities are approximately 63 dBA L_{eq} at 50 feet assuming unshielded conditions. Bottling would be accomplished with a mobile bottling truck on two to four days per year. Noise levels generated by bottling activities are approximately 67 dBA L_{eq} at 50 feet assuming unshielded conditions.

Crushing and bottling activities would be conducted on the south side of the winery building during daytime hours. Given the distance and expected shielding provided by the building itself, noise levels resulting from crushing and bottling activities are estimated to be approximately 38 to 42 dBA L_{eq} at the nearest residence. Such noise sources could occur for more than 30 minutes in any hour and would be below the daytime noise level limits established by the County (50 dBA). Hourly average noise levels generated by bottling and crushing activities would be similar to or less than existing ambient daytime noise levels generated by local traffic on Silverado Trail. Intermittent maximum noise levels generated during deliveries of grapes or intermittent forklift movements would be well below the County's maximum noise level limit of 70 dBA.

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Special Events

On nine occasions per year, the winery would host special events with a maximum of 10 to 30 guests in attendance. Special events would generally be limited to wine-tasting and other trade related events such as winemaker's dinners, etc. Weddings, concerts, or other sources of amplified sound are not proposed. Special events would likely be held within the winery building or on the south side of the winery building. Noise levels generated by such wine tasting events would generally be low and would meet the Napa County Noise Ordinance limits at the nearest residential property line.



This concludes our assessment of noise resulting from the Pavitt Family Vineyards Winery project. If you have any questions or comments, please do not hesitate to call.

Sincerely,

Handwritten signature of Michael S. Thill in blue ink.

Michael S. Thill
Senior Consultant
ILLINGWORTH & RODKIN, INC.

(08-165)